

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

(Currently Amended) A CMOS image sensor, comprising:

pixel sensors arranged in the form of a two-dimensional array, each pixel sensor comprising a photodiode at a signal detection node and a pair of pass transistors, which passes a photodiode reset signal to a gate of a transistor that resets said photodiode, only when said pixel sensor is selected;

means, disposed in each pixel sensor, for obtaining a signal whose reset noise is reduced and that corresponds to the absolute value of the amount of incident light; and

means for outputting said signal in a block-scanning fashion

wherein said photodiode reset signal is given as the logical AND of a column block selection signal and a pixel rest signal.

2.-3. (Canceled)

4. (Currently Amended) ~~A pixel sensor comprising:~~

~~floating diffusion at a signal detection node; and~~

~~a pair of pass transistors, which passes a transfer signal to the gate of a transistor that resets said~~ A CMOS image sensor, comprising:

pixel sensors arranged in a two-dimensional array, each pixel sensor comprising floating diffusion at a signal detection node and a pair of pass transistors, which passes a transfer signal to a gate of a transistor that transfers a signal charge of a photodiode, only when said pixel sensor is selected;

means, disposed in each pixel sensor, for obtaining a signal whose rest noise is reduces and that corresponds to the absolute value of the amount of incident light; and

means for outputting said signal in a block-scanning fashion;

wherein said transfer signal is given as the logical AND of a column block selection signal and a pixel transfer signal.

5. (Canceled)

6. (Currently Amended) A CMOS image sensor comprising:
a plurality of photogate-type pixel sensors arranged in a two-dimensional array;
a pair of pass transistors for passing a photogate control signal thereby transferring a ~~signal charge~~ corresponding signal charges, only when a corresponding row is selected; and
a pair of pass transistors for passing a pixel transfer signal thereby allowing a ~~signal charge~~ corresponding signal charges to be transferred, only when a corresponding column block is selected.

7. (Currently Amended) The CMOS image sensor according to ~~Claim 6~~ claim 6, wherein said pixel transfer signal falls down before said photogate control signal rises up.

8. (Currently Amended) A CMOS image sensor comprising:
a pixel sensor according to ~~claim 2~~ claim 1; and
means for selectively connecting the output of the pixel sensor to a circuit for reading one row of block.

9. (Original) A CMOS image sensor comprising:
a pixel sensor according to claim 4; and
means for selectively connecting the output of the pixel sensor to a circuit for reading one row of block.

10. (Original) A CMOS image sensor comprising:
a pixel sensor according to claim 6; and
means for selectively connecting the output of the pixel sensor to a circuit for reading one row of block.

11. (Original) A camera that automatically controls brightness, comprising:
a CMOS image sensor according to claim 1;
means for estimating the average brightness over an entire screen of said CMOS image sensor from brightness detected for a several blocks in a central area and in a peripheral area of the screen; and
a programmable gain amplifier having a gain that is automatically controlled in accordance with the estimated brightness.

12. (Canceled)

13. (Currently Amended) A camera that automatically controls brightness, comprising:
a CMOS image sensor according to ~~claim 5~~ claim 4;
means for estimating the average brightness over an entire screen of said CMOS image sensor from brightness detected for a several blocks in a central area and in a peripheral area of the screen; and
a programmable gain amplifier having a gain that is automatically controlled in accordance with the estimated brightness.

14. (Original) A camera that automatically controls brightness, comprising:
a CMOS image sensor according to claim 6;
means for estimating the average brightness over an entire screen of said CMOS image sensor from brightness detected for a several blocks in a central area and in a peripheral area of the screen; and
a programmable gain amplifier having a gain that is automatically controlled in accordance with the estimated brightness.

15. (Original) A camera that automatically controls brightness, comprising:
a CMOS image sensor according to claim 7;

means for estimating the average brightness over an entire screen of said CMOS image sensor from brightness detected for a several blocks in a central area and in a peripheral area of the screen; and

a programmable gain amplifier having a gain that is automatically controlled in accordance with the estimated brightness.

16. (Original) A camera that automatically controls brightness, comprising:

a CMOS image sensor according to claim 8;

means for estimating the average brightness over an entire screen of said CMOS image sensor from brightness detected for a several blocks in a central area and in a peripheral area of the screen; and

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a programmable gain amplifier having a gain that is automatically controlled in accordance with the estimated brightness.

17. (Original) A monitor camera, comprising:

a CMOS image sensor according to claim 1;

means for detecting whether there is a substantial change in an image by reading several blocks in a central area and in a peripheral area of an image screen of said CMOS image sensor; and

means for continuously taking an image over the entire screen when a substantial change is detected.

18. (Canceled)

19. (Currently Amended) A monitor camera, comprising:

a CMOS image sensor according to ~~claim 5~~ claim 4;

means for detecting whether there is a substantial change in an image by reading several blocks in a central area and in a peripheral area of an image screen of said CMOS image sensor; and

means for continuously taking an image over the entire screen when a substantial change is detected.

20. (Canceled)

21. (Original) A monitor camera, comprising:

a CMOS image sensor according to claim 6;

means for detecting whether there is a substantial change in an image by reading several blocks in a central area and in a peripheral area of an image screen of said CMOS image sensor; and

means for continuously taking an image over the entire screen when a substantial change is detected.

22. (Original) A monitor camera, comprising:

a CMOS image sensor according to claim 7;

means for detecting whether there is a substantial change in an image by reading several blocks in a central area and in a peripheral area of an image screen of said CMOS image sensor; and

means for continuously taking an image over the entire screen when a substantial change is detected.

23. (Original) An autofocus camera, comprising:

a CMOS image sensor according to claim 1;

means for adjusting focus by reading several blocks in a central area of an image screen of said CMOS image sensor; and

means for taking an image over the entire screen after completion of the focus adjustment.

24. (Canceled)

25. (Currently Amended) An autofocus camera, comprising:

a CMOS image sensor according to ~~claim 5~~ claim 4;

means for adjusting focus by reading several blocks in a central area of an image screen of said CMOS image sensor; and

means for taking an image over the entire screen after completion of the focus adjustment.

26. (Original) An autofocus camera, comprising:

a CMOS image sensor according to claim 6;

means for adjusting focus by reading several blocks in a central area of an image screen of said CMOS image sensor; and

means for taking an image over the entire screen after completion of the focus adjustment.

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27. (Original) An autofocus camera, comprising:

a CMOS image sensor according to claim 7;

means for adjusting focus by reading several blocks in a central area of an image screen of said CMOS image sensor; and

means for taking an image over the entire screen after completion of the focus adjustment.

28. (Original) An autofocus camera, comprising:

a CMOS image sensor according to claim 8;

means for adjusting focus by reading several blocks in a central area of an image screen of said CMOS image sensor; and

means for taking an image over the entire screen after completion of the focus adjustment.

Amendments to the Drawings:

The attached replacement drawing sheets makes changes to Figs. 8, 10 and 12 and replaces the original sheets with Figs. 8, 10 and 12.

Attachment: Replacement Sheets